

II. CLAIM AMENDMENTS

1. (Currently Amended) A method of suppressing noise in a signal containing noise to provide a noise suppressed signal in which an estimate is made of the noise and an estimate is made of speech together with somea fraction of incoming noise, wherein the estimate of speech together with some the fraction of the incoming noise is used to generate a noise reducing filter.
2. (Cancelled)
3. (Previously Presented) A method according to claim 1 in which the level of the noise included in the estimate of the speech together with some noise is variable so as to include a desired amount of noise in the noise suppressed signal.
4. (Previously Presented) A method according to claim 3 in which the level of the noise in the estimate of the speech together with some noise provides an acceptable level of context information.
5. (Currently Amended) A method according to claim 1 in which the level of the noise in the estimate of the speech together with some- the fraction of the incoming noise is below the mask limit of the speech and so is not audible to a listener.
6. (Currently Amended) A method according to claim 1 in which the level of noise in the estimate of the speech together with some the fraction of the incoming noise approaches the mask limit of the speech and so some noise context information is left in the signal.
7. (Previously Presented) A method according to claim 1 further comprising producing a gain co-efficient for noise suppression in which a first estimation of the gain co-efficient

is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.

8. (Previously Presented) A method according to claim 7 in which the estimated noise is power spectral density.

9. (Previously Presented) A method according to claim 7 in which the first estimation is used to update the estimated noise.

10. (Currently Amended) A method according to claim 1 in which the estimate of speech together with some the fraction of the incoming noise is estimated to have a noise level lower than the noise level in the signal containing noise.

11. (Currently Amended) A method according to claim 1 in which during generation of the noise reducing filter, a reducing factor is applied to reduce the noise level of the estimate of speech together with some the fraction of the incoming noise relative to the noise level in the signal containing noise.

12. (Previously Presented) A method according to claim 1 in which the noise reducing filter is a Wiener filter.

13. (Cancelled)

14. (Currently Amended) A noise suppressor for suppressing noise in a signal containing noise to provide a noise suppressed signal comprising a noise estimator to make an estimate of the noise and a reduced noisy speech estimator to make an estimate of speech together with some a fraction of the incoming noise, and a noise reducing filter generator to use the estimate of speech together with some the fraction of the incoming noise to generate a noise reducing filter.

15. (Cancelled).

16. (Currently Amended) A noise suppressor according to claim 14 in which the level of the noise included in the estimate of the speech together with some the fraction of the incoming noise is variable so as to include a desired amount of noise in the noise suppressed signal.

17. (Currently Amended) A noise suppressor according to claim 14 in which the level of the noise the estimate of the speech together with some the -fraction of the incoming noise provides an acceptable level of context information.

18. (Currently Amended) A noise suppressor according to claim 14 in which the level of the noise in the estimate of the speech together with some the fraction of the incoming noise is below the mask limit of the speech and so is not audible to a listener.

19. (Currently Amended) A noise suppressor according to claim 14 in which the level of noise in the estimate of the speech together with some the fraction of the incoming noise approaches the mask limit of the speech and so some noise context information is left in the signal.

20. (Currently Amended) A noise suppressor according to claim 14 in which the estimate of speech together with some the fraction of the incoming noise is estimated to have a noise level lower than the noise level in the signal containing noise.

21. (Currently Amended) A noise suppressor according to claim 14 in which the noise reducing filter generator, during generation of the noise reducing filter, is adapted to apply a reducing factor to reduce the noise level of the estimate of speech together with some the fraction of the incoming noise relative to the noise level in the signal containing noise.

22. (Previously Presented) A noise suppressor according to claim 14 in which the noise reducing filter is a Wiener filter.

23. (Previously Presented) A noise suppressor according to claim 14 comprising a gain coefficient computation block in which a first estimation of the gain coefficient is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.

24. (Currently Amended) A communications terminal comprising a noise suppressor for suppressing noise in a signal containing noise to provide a noise suppressed signal, the noise suppressor comprising a noise estimator to make an estimate of the noise and a reduced noisy speech estimator to make an estimate of speech together with some_a fraction of the incoming noise, and a noise reducing filter generator to use the estimate of speech together with some_the fraction of the incoming noise to generate a noise reducing filter.

25. (Previously Presented) A communications terminal according to claim 24 which is mobile.

26. (Previously Presented) A communications terminal according to claim 24 which is fixed.

27. (Cancelled)

28. (Previously Presented) A communications terminal according to claim 24 in which the level of the noise included in the estimate of the speech together with some noise is variable so as to include a desired amount of noise in the noise suppressed signal.

29. (Currently Amended) A communications terminal according to claim 24 in which the level of the noise in the estimate of the speech together with some_fraction of the incoming noise provides an acceptable level of context information.

30. (Currently Amended) A communications terminal according to claim 24 in which the level of the noise in the estimate of the speech together with some_the fraction of

the incoming noise is below the mask limit of the speech and so is not audible to a listener.

31. (Currently Amended) A communications terminal according to claim 24 in which the level of noise in the estimate of the speech together with some the fraction of the incoming noise approaches the mask limit of the speech and so some noise context information is left in the signal.

32. (Currently Amended) A communications terminal according to claim 24 in which the estimate of speech together with some the fraction of the incoming noise is estimated to have a noise level lower than the noise level in the signal containing noise.

33. (Previously Presented) A communications terminal according to claim 24 in which the noise reducing filter generator, during generation of the noise reducing filter, is adapted to apply a reducing factor to reduce the noise level of the estimate of speech together with some noise relative to the noise level in the signal containing noise.

34. (Previously Presented) A communications terminal according to claim 24 in which the noise reducing filter is a Wiener filter.

35. (Previously Presented) A communications terminal according to claim 24 comprising a gain coefficient computation block in which a first estimation of the gain coefficient is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.

36. (Currently Amended) A communications network comprising a noise suppressor for suppressing noise in a signal containing noise to provide a noise suppressed signal, the noise suppressor comprising a noise estimator to make an estimate of the noise and a reduced noisy speech estimator to make an estimate of speech together with some a fraction of the incoming noise, and a noise reducing filter generator to use the estimate

of speech together with ~~some~~ the fraction of the incoming noise to generate a noise reducing filter.

37. (Cancelled)

38. (Previously Presented) A communications network according to claim 36 in which the level of the noise included in the estimate of the speech together with some noise is variable so as to include a desired amount of noise in the noise suppressed signal.

39. (Currently Amended) A communications network according to claim 36 in which the level of the noise in the estimate of the speech together with ~~some~~ the fraction of the incoming noise provides an acceptable level of context information.

40. (Currently Amended) A communications network according to claim 36 in which the level of the noise in the estimate of the speech together with ~~some~~ the fraction of the incoming noise is below the mask limit of the speech and so is not audible to a listener.

41. (Currently Amended) A communications network according to claim 36 in which the level of the noise in the estimate of the speech together with ~~some~~ the fraction of the incoming noise approaches the mask limit of the speech and so some noise context information is left in the signal.

42. (Currently Amended) A communications network according to claim 36 in which the estimate of speech together with ~~some~~ the fraction of the incoming noise is estimated to have a noise level lower than the noise level in the signal containing noise.

43. (Currently Amended) A communications network according to claim 36 in which the noise reducing filter generator, during generation of the noise reducing filter, is adapted to apply a reducing factor to reduce the noise level of the estimate of speech

together with some the fraction of the incoming noise relative to the noise level in the signal containing noise.

44. (Previously Presented) A communications network according to claim 36 in which the noise reducing filter is a Wiener filter.

45. (Previously Presented) A communications network according to claim 36 comprising a gain coefficient computation block in which a first estimation of the gain coefficient is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.